

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
26 July 2001 (26.07.2001)

PCT

(10) International Publication Number
WO 01/52647 A1

- (51) International Patent Classification⁷: **A01N 1/02**
- (21) International Application Number: **PCT/GB01/00241**
- (22) International Filing Date: 22 January 2001 (22.01.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0001172.6 20 January 2000 (20.01.2000) GB
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *with international search report*
— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments*
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: PHYSIOLOGICAL MEDIUM FOR PERFUSING, PRESERVING AND STORING ISOLATED CELL, TISSUE AND ORGAN SAMPLES

(57) Abstract: A physiological liquid medium is provided having the basic, synergistic components to allow its universal application in preserving cellular and functional integrity *in vitro* of different cell, tissue and organ types isolated from different mammalian species. The medium comprises an aqueous solution in sterile purified water of: i) a salt component comprising: a) from 100 to 150 mmoles/L of sodium ions, b) from 2.5 to 6.2 mmoles/L of potassium ions, c) from 1.0 to 2.5 mmoles/L of calcium ions, d) from 0.4 to 25 mmoles/L of magnesium ions, and e) from 96 to 126 mmoles/L of chloride ions; ii) a buffer component comprising: f) from 21 to 27 mmoles/L of bicarbonate ions, and g) from 1 to 12 mmoles/L of TES, MOPS or BES; iii) a substrate component comprising: h) 2 to 11 mmoles/L of glucose, i) 50 to 150 µmoles/L of glycerol and j) 7 to 15 µmoles/L of choline; iv) an amino acid component comprising: k) 5 to 400 µmoles/L of glutamate, l) 5 to 200 µmoles/L of aspartate and m) 100 to 2000 µmoles/L of glutamine; v) a co-enzyme component comprising: n) 1 to 120 nmoles/L of thiamine cocarboxylase; vi) a vitaminoid component comprising: o) 40 to 70 µmoles/L of D- or DL- or L-carnitine; vii) a protein component comprising: p) 5 to 200 m I.U./L of porcine or human insulin.

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